

Winter

PRESIDENT'S MESSAGE

A brand-new year and a brand-new start. Time to reminisce about the past and look forward to the future. Spend time reflecting on what you accomplished last year, what activities you participated in, and what made you happy. Make a pledge to yourself to do more of what made you happy.

Plenty of opportunities to be happy with all the volunteer activities our Master Gardener leaders and VCE partners create. Thank you to all the Prince William County Master Gardeners, and all the Master helpers that allowed us to achieve our goals of outreach and education for our community last year. I continue to be amazed at the dedication, commitment, and willingness to volunteer from all the Master Gardeners I interact with. You are helping to make a positive difference in all of Prince William County. I look forward to meeting and working with even more of you in 2023. Thank you for all that you do - and Garden On!!!!

-Janene Cullen, PhD, President, MGPW Board

LOOKING FOR MENTORS FOR 4HERS AT THE TEACHING GARDEN

Some of you might remember when we had a Children's Program at our Saturday in the Garden days. Across the country, there are Master Gardener programs that include a Junior Master Gardener program. With that in mind, I thought it might be nice to give it a try by coming up with something where we are working with kids again. I've talked to Thomas and Mary Beth, our 4H Agent. To move forward we need Master Gardeners that are willing to be mentors. This would be done on our Saturday workdays to start. That means you need to commit to coming once a month to help. It may be another day as well, such as a Thursday evening or a Saturday in the Garden Day.

If you are interested you will also have to take the Youth Training for volunteers who work with children. See details in the next paragraph. This program is in the early stages and it will not go forward without having enough help. I think 4-6 Master Gardeners would be a good number to start. Give it some thought, and let me know if you are interested. My email is lip6651@comcast.net Thank you all..

-Leslie Paulson

(continued p. 10)



	_
INSIDE THIS ISSUE	
My Turf on Ice	2
Lawn Care PWC	2
Christmas Cactus	2
Edible and Ecological	
Landscape Design	3
Recipe: Pawpaw Bread	3
The U.S. National Arboretum	4
Seeing Trees	4
Saving Seeds	5-8
Wild Harvest	5
Congratulations & Welcome!	9
Conservation Project Aims to	
Help Preserve Lake Montclair	10-1
Gardening Keeps You Healthy	12-1
A Morning at the Helpdesk	14
Volunteers Plant Trees Along	
the Occoquan	15
Managing Larger Properties for	
Birds, Butterflies, and People	16
City Wildlife	17
Solar Panels vs. Trees—How	
to Choose?	18
Green Bottle Fly	19
Free Online Classes	22

- Lawn
 Prized Plants
 Garden to Table
 Out and About
 Book Nook

- Plant NOVA Tr

LAWN CARE FOR PWC

Virginia is part of a transition zone between areas where cool and warm season grasses thrive. This can make lawn care in our area challenging. If you're a first time homeowner, new to Prince William County or just looking to better manage your lawn, Virginia Cooperative Extension can help.

We offer help with interpreting soil test results, information on cultural practices, pest identification and pest control recommendations.

For more assistance with lawn care, contact the Virginia Cooperative Extension Environmental Educator at 703-792-4037

or BESTlawns@pwcgov.org.

The <u>BEST Lawn</u> Program can sample and measure your lawn for you and provide you with a fertilizer schedule that will help promote a healthy lawn.

LAWN: MY TURF'S ON ICE



podcast from Mike Goatley, Extension Turfgrass Specialist at Virginia Tech

This podcast details the importance of keeping traffic off of frost or ice-covered turf, what kind of damage to expect, and how long the damage will likely persist.

Here are a few highlights:

- * Trafficking frost or ice-covered turf usually results in extensive physical "breaking" of the leaves.
- * The damaged turf leaves don't fall away completely from the stem, but instead slowly turn brown and die.
- * You will likely see visible damage from the traffic (in the form of footprints, paw prints from pets or wild animals, etc.) within a few days and the evidence of the trafficked turf will remain for several weeks until new leaves form later in the spring.
- * The good news is that the damage is primarily cosmetic and does not impact the overall survival of your lawn.

For the full article and podcast, click here.

Contact the Horticulture Helpdesk with questions, or sign up for the <u>BEST Lawns</u> <u>program</u> (mastergardener@pwcgov.org; 703-792-7747) ***

Christmas cactus (*Schlumbergera*) photo by Jason Alexander

PRIZED PLANTS: CHRISTMAS CACTUS

by Maria Stewart, Master Gardener Volunteer

Christmas cactus is a wonderful addition to any indoor plant collection. With so many colors, and forgiving care requirements, they make welcome gifts even for those without much gardening experience. With proper care, they last for years. I have one that my mother gave me almost 25 years ago! And, since they are so easy to propagate, I've shared cuttings with many delighted friends.

For the best blooms, they like bright light, short days, and cool night temperatures. They also like to be somewhat pot-bound. To propagate, simple snap a section or two and stick the segments into moist soil. I like to take several cuttings, stick them in moist soil, then enclose them in a plastic bag for a week or two, until roots start to form. After that, remove from the bag, and enjoy!

For more information on Christmas cactus, and other holiday plant care see: Virginia Tech, Horticulture expert shares tips on how to care for festive holiday plants $\diamond \diamond \diamond$



Michael Judd Edible Landscapes

GARDEN TO TABLE: EDIBLE AND ECOLOGICAL LANDSCAPE DESIGN

by Maria Stewart, Master Gardener Volunteer

Move over lawns—there's a better way to landscape!

Michael Judd, Master Gardener, and "an eclectic designer that melds form, function, and productivity seamlessly," shares his expertise, showing us how to make better use of our landscapes. He grew up in northern England and the Appalachian mountains of Maryland, and has decades of experience running a non profit in Latin America, leading an arid lands research project in southeastern Spain, and studying at the New York Botanical Garden.

Judd applies whole system design techniques, drawing from his experiences learning about Mayan practices that mimicked natural patterns and combining the parallel design system of permaculture that grew out of Australia. Although he offers designs for agroforestry, food forests, regenerative site design, water management, edible landscaping, and even green burial, Judd is particularly passionate about paw paws (*Asimina triloba*).

Pawpaws are closely related to the tropical custard apple, and native to North America. They have a creamy rich texture, and some describe their flavor as similar to mango, pineapple, or banana.

Judd offers an online course, *For the Love of PawPaws*, which teaches everything you need to know about growing pawpaws. He also shares free content on his YouTube Channel, *Edible Landscaping with a Permaculture Twist*, including planting, caring for, preserving, and enjoying pawpaws. ♦♦♦



In this video, Judd shares his technique for guerrilla planting pawpaws—doesn't get easier than that!; Guerrilla Planting PawPaws w/Michael Judd

RECIPE

Pawpaw Bread

INGREDIENTS

- 1 c. melted butter
- 2 c. sugar
- 4 eggs
- 2 c. pawpaw pulp
- 1 Tbsp. lemon juice
- 4 c. sifted all-purpose flour
- 2 tsp. baking powder
- 3 c. pecan pieces plus 16 pecan halves

INSTRUCTIONS

Preheat oven to 3750 F.

Grease two 9x4x2-inch loaf pans.

Beat together butter, sugar, and eggs.

Add and beat in the pawpaw pulp and lemon juice.

Sift the flour and baking powder together, and stir them into the batter.

Stir in the pecans and scrape the batter into the loaf pans.

Garnish each loaf with 8 pecan halves, and bake for 1 hour and 15 minutes.

The top corners of the loaf will burn, but that adds flavor and character.

source: Kentucky State University

OUT AND ABOUT:THE U.S. NATIONAL ARBORETUM

by Jamie Nick, Master Gardener Volunteer

The U.S. National Arboretum is located in Northeast Washington, DC on 451 acres with nearly ten miles of winding roadway. It was established by an Act of Congress in 1927, and is administered by the U.S. Department of Agriculture's Agricultural Research Service.

Offering research and educational programs here are just some of their many collections worth the trip: Asian, azalea, dogwood, conifer, grove of state trees, holly and magnolia, National Boxwood Collection, National Herb Garden, National Capital Columns, perennial collections, and the Washington youth garden. I've been many times, but haven't yet seen the Grove of State Trees. That's for my next visit! ♦♦♦



map of the U.S. National Arboretum grounds

MASTER GARDENERS PRINCE WILLIAM TEACHING GARDEN

The Teaching Garden is a project of the Master Gardener
Volunteers. It began as a garden to grow fresh produce for the Plant a Row for the Hungry project and a place where Master Gardeners could teach homeowners how to grow vegetables. The Teaching Garden displays low maintenance gardening techniques that homeowners can implement in their own gardens. It also features plants that grow well locally.

View the <u>Teaching Garden</u>
<u>Brochure</u> which contains a map of the teaching garden bed layout.
View the upcoming events at the Garden <u>here</u> as well as other horticulture classes offered by the Master Gardeners.

Sign up for
The Teaching Garden
blog to stay-up-to-date,
and get the latest
In Season with MGPW
newsletter!

"I purchased this book...and I'm glad I did."

BOOK NOOK: SEEING TREES

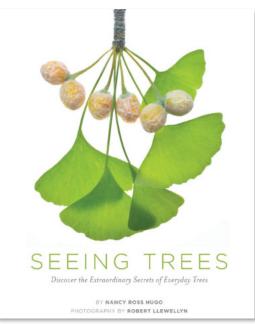
BY NANCY ROSS HUGO, PHOTOGRAPHY BY ROBERT LLEWELLYN

by Jamie Nick, Master Gardener Volunteer

I purchased this book many years ago whilst at a program given by author, Nancy Ross Hugo in Charlottesville, and I'm glad I did. I'm not a coffee table book kinda girl, but if I were, I would display this book. Robert Llewellyn's photograph is stunning and *Seeing Trees* is well written, with useful information.

Nancy Ross Hugo's website shares:

"Seeing Trees celebrates seldom seen but easily observable tree traits and invites nature lovers to watch trees with the same care and sensitivity that birdwatchers watch birds. Illustrated by fine art photographer Robert Llewellyn, Seeing Trees describes some of the most charismatic tree structures (including leaves, flowers, buds, leaf scars, twigs, and bark) and provides in depth profiles of ten familiar species---including such beloved species as white oak, southern magnolia, white pine, and tulip poplar." ◊◊◊





common milkweed seeds (Asclepias syriaca) photo by Jason Alexander

INSIGHTS: SAVING SEEDS

by Abbie & Vincent Panettiere, Master Gardener Volunteers

Looking to the future, a happy part of my gardening each summer is gathering the seeds of vegetables and flowers that have done very well. I save seeds particularly from non-hybrid tomatoes that have done the best that growing season to use for next year. I try to avoid saving hybrid seeds as the results would be unpredictable because the resulting plants would be of the parent strains that produced the hybrid and likely not produce fruit similar to the original crop.

There are many sites online that will give you instructions on how to properly prepare and save your seeds. It's especially important to label the seeds with name and date saved. I freely admit, though, that I violate the art world's rule of "provenance" in regards to the seeds I save because sometimes they come from odd places. For instance, a batch of tomato seeds I saved this year labeled "Mulch Bin Mystery" are from a volunteer vine that came up in one of our mulch bins and produced tomatoes in great number. They were perfect, as far as I could see. No blemishes, no marks from passing marauders, excellent flavor and keeping qualities. If I'm lucky, the seeds will produce the same sort of tomatoes next year and every year after that. Some years, I'm lucky, but not always.

Seeds have been saved this way for some 12,000 to 14,000 years, or as long as humans have tilled the earth and grown crops from seeds saved from previous crops. This is also the way various vegetables have improved over thousands of years. By saving seeds from the best of the crop, the seeds being saved have gradually improved the crops raised. Corn can provide an example. Indigenous peoples are said to have helped create modern corn by selectively breeding wild grasses over long periods of time.

Wild Harvest

a television series

Follow along with Les and Chef Paul as they explore the culinary potential of wild ingredients in locations across Canada and the United States.



"Outdoor and culinary enthusiasts will learn how to harvest and cook with ingredients like Cattail, Wild Radish, Walking Stick Kelp, Milkweed, Wild Turkey, Wild Mint, Pine Mushrooms and Mussels."

available on YouTube

Insights: Saving Seeds Sources & For More Information

https://www.rafiusa.org/blog/cary-fowler-svalbard-global-seed-vault/rafi
Cary Fowler explains the Svalbard Global Seed Vault by RAFI - USA
Staff|Published April 3, 2014

https://www.livescience.com/56247-global-seed-vault.html
LiveScience
Facts About the Global Seed
Vault: By Alina Bradford
published September 23,

https://www.ars.usda.gov/plains-area/fort-collins-co/center-for-agricultural-resources-research/paagrpru/docs/seed/us-contribution-to-the-svalbard-global-seed-vault/Agricultural Research Service U.S. DEPARTMENT OF AGRICULTURE Agricultural Genetic Resources Preservation Research: Fort Collins, CO Last Modified: 9/18/2020

https://www.resilience.org/stories/2021-03-29/around-the-world-indigenous-seed-banks-are-helping-to-preserve-culture-boost-nutrition-and-protect-the-environment/
Resilience
Around the world,
Indigenous seed banks are helping to preserve culture, boost nutrition and protect the environment
By Andrew Wight, originally published by Ensia, March 29, 2021

https://www.merriamwebster.com/dictionary/ landrace Merriam Webster landrace plural landraces

https:// www.seedsavers.org/story Seed Savers Exchange By selecting and saving the best of their crops, farmers, and gardeners have gradually produced the food plants we see today. "Landrace" is the term for the plants developed in such a way. According to Merriam Webster, "landrace" is defined as: a local variety of a species of plant or animal that has distinctive characteristics arising from development and adaptation over time to conditions of a localized geographic region and that typically displays greater genetic diversity than types subjected to formal breeding practices.

By saving the best of the crop, plants are developed which are particularly well adapted to the growing conditions found in their particular local region. Landraces developed this way are more resilient, and can withstand local pests and plant diseases. They are better prepared to adapt to climate change, and perhaps less than perfect growing conditions. They can also be more nutritious than crops grown from seeds which have been produced by formal breeding.

From the time that people learned to depend on growing crops rather than living in small groups as hunter gatherers, seeds have been collected from crops and saved to provide seed for the next year's crop. The Neolithic Revolution, as this first event was called, is said to have begun some 12,000 years ago in the Middle East as the earth began to warm after the last Ice Age, and where humans are thought to have first begun farming. Such crops as wild wheat and barley began to grow as the climate warmed.

From then on up to the 19th century, saving seeds for next year's crop was really the only way most farmers and home gardeners had to provide for themselves. To understand the importance of this, plants make up over 80% of the human diet. Landraces which were important to various peoples traveled with them from their homes to and within the United States. A source in the Denver Public Library said that Africans kidnapped and brought to this country braided seeds into their hair before crossing the ocean.

The senior director of the Cherokee Nation's Environmental Resources group says that when the Cherokee people were moved from their southeastern homes to Oklahoma (the Trail of Tears) "In 1838, only one crop went with the tribes because the tribes didn't feel like it was right to uproot the others," he says. "Ninety-nine percent of those things were not removed with us, so we started at zero." Since 2005, the Cherokee have focused on re-discovering the crops lost during that uprooting and now, he says, the Cherokee Nation Seed Bank preserves more than 100 different kinds of seeds, many of which are distributed to growers across the United States.

Before industrial agriculture became dominant, there were thousands of seed companies and public breeding institutions. In the midnineteenth century, however, government-based programs appeared and farmers, home gardeners, and growers of crops were discouraged from saving seeds on their own. Seeds were bred to show various desired traits such as good flavor, good keeping qualities, and the ability to grow successfully over wide areas of the country. The qualities that gave locally raised plants the ability to thrive in areas to which they

https://seedsavers.net/ Seed Savers Network

https://imp.center/agri/farmers-privilege-and-farmers-rights/
IMP CENTER - Exclusive
Job Portal for Farmers in India

https:// seedsaverskenya.org/whatwe-do/ Seed Savers Kenya

https://en.wikipedia.org/ wiki/Seed_saving Seed saving From Wikipedia, the free encyclopedia

https:// libraries.indiana.edu/history -seed-saving Indiana University Bloomington/Wylie House Museum The History of Seed Saving Source: Wylie House News and Notes October 25th, 2017

https://www.denverlibrary.org/blog/books/heidie/whats-growin-history-and-politics-seed-saving
Denver Public Library
What's Growin On: the
History and Politics of Seed
Saving
"We do not own seeds, we borrow them from our children"
Rowen White

https:// extension.oregonstate.edu/ gardening/flowers-shrubstrees/seed-saving-basics Oregon State University OSU Extension Service Seed saving basics

treaty/areas-of-work/the-multilateral-system/
overview-mls/en/
Food and Agriculture
Organization of the United
Nations
International Treaty on
Plant Genetic Resources for
Food and Agriculture

were local and which had a richer supply of nutrients were lost to farmers. In the United States, 90% of the population in 1810 were farmers, and they became dependent on high-yielding seeds with little genetic diversity. At present, 2% of our population are farmers and they rely on these seeds to a great extent.

Further complicating matters, in 1980 the Supreme Court ruled that living organisms and their genetic material could be patented making it illegal to save seeds from patented plants. This has led to a loss of knowledge about saving landraces for their values. It has also meant that many varieties of plants, perhaps 75%, have been lost. The result has been that food systems with little diversity are weakened and more susceptible to collapse.

The practice of saving seeds from crops these days has been practiced to a great deal by poorer nations and indigenous people for whom the cost of patented seeds is apt to be prohibitive. Additionally, the supply of these seeds inadequate, at less than 10% of their needs. There is some protection in a practice called "farmer's privilege" which allows a farmer to collect the seed he has sowed for use in the following year. However, the farmer is not allowed to exchange seed with other farmers.

Lately, however, the practice of saving seeds, particularly through seed libraries and seed banks, has allowed farmers to help address the problem of patented seeds and to return to varieties of fruits and vegetables that grow well in their local areas. Here in America there are companies, such as Seed Savers Exchange of Decorah, Iowa, whose mission is to preserve heirloom varieties and share seeds. Farmers in poor countries have done much of the work in regaining the use of seeds which grow well in their areas and may be counted on from year to year. In the last 20 years, according to two sources, more than 450 seed libraries have been established around the world.

The Global Seedsavers site explains the difference between "seed libraries" and "seed banks." Seed libraries, according to them, are "... created for community members to share and distribute local seeds to grow their own food. The seeds it stores are often free or affordably priced for people. Most seed libraries are housed at locations which are accessible to community members. For example, an actual library or a community center. Seeds in seed libraries are meant to be used. The Global site says "We want people to 'borrow' the seeds, tend to the plants, save some seeds, return them to the library so that more people can gain access to the seeds in the next planting season."

They also say "...seed banks are meant for "deposit and savings." Their main goal is to keep as many seeds as possible to ensure that plant breeds do not die out, and to ensure that seeds are viable until they will be needed. Hence, most seed banks are sterile, cold-storage facilities which are located in disaster-proof buildings."

No account of seed saving would be complete without mentioning the Svalbard Global Seed Vault located near the town of Longyearbyen with a population just over 2,000 people. It is the world's northernmost

https://passel2.unl.edu/ view/lesson/fefc45a36b9c/5 Plant and Soil Sciences eLibrary International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA) Multilateral System of Access and Benefit -sharing

https://www.history.com/ topics/pre-history/neolithicrevolutionHistory.com Neolithic Revolution

IT Education Learning Agricultural Revolution: Definition, Causes, Time Period & More Agricultural Revolution Definition There is nothing original in collecting seeds from desired plants. It goes back many centuries and well before recorded history. Although our distant ancestors spoke in sounds, totally unrecognizable in meaning to us, and the plants that they valued then would probably be regarded as annoying weeds to us, I know that we, thousands of years apart, share a sense of accomplishment and hope as we patiently pick out the seeds and look towards the future.

settlement, on an island north of mainland Europe, halfway between Norway and the North Pole.

In 1975, Gary Fowler, an American scientist, conservationist, and biodiversity advocate, realized that crop diversity was rapidly being lost and that it was critical to our survival. Locally grown seeds were disappearing, particularly because of the challenges inherent with climate change.

Although there are more than 1700 gene banks around the world keeping collections of seeds, they are all susceptible to damage from war, natural disasters, and other threats. Fowler developed the idea of "...a backup storage facility where all of the world's seeds could be stored as safely as possible." The vault is funded largely in part by the Bill and Melinda Gates Foundation.

According to the Agricultural Research Service of the U.S. Department of Agriculture, "Constructing the vault required drilling a 390 feet tunnel into permafrost on the side of a mountain on Spitsbergen Island. The vault consists of three large concrete chambers that collectively have the capacity to hold 3.5 million seed samples. Seeds of crops important for food and agriculture will be safely stored for hundreds to thousands of years, protected from global or regional catastrophes."

Svalbard Global Seed Vault opened on February 26th 2008. At present, more than 825,000 varieties of seeds are protected and the number continues to grow.

In an article in Resilience written by Andrew Wight, he mentions that in February 2020, the Cherokee Nation became the first Indigenous nation in the U.S. to deposit its traditional seeds in the Svalbard vault. In 2015, the Syrian war brought the first withdrawal from the seed vault. The seeds replaced those damaged in a gene bank near the wartorn Syrian city of Aleppo. ♦♦♦



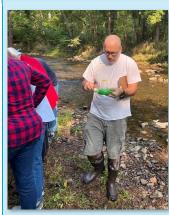
CONGRATULATIONS & WELCOME:

MASTER GARDENER INTERNS 2022



Be sure to extend a *Hello and Welcome!*to our new Master Gardener Interns!
We're looking forward to seeing all of you out in the community, sharing your time, talents, and enthusiasm!

















some members of the restoration team; photo courtesy of Larry Lehowicz

TAKING ACTION: CONSERVATION PROJECT AIMS TO HELP PRESERVE LAKE MONTCLAIR

by Larry Lehowicz¹ and Eric Fagerholm¹

In 2017, Montclair homeowners and environmental activist Eric Fagerholm, started thinking about a largely neglected and barren plot of land adjacent to the Lake Montclair Shopping Center on the southeast corner of Route 234 and Waterway Drive. It was obvious that rainwater was eroding large amounts of soil and nutrients from this area into Lake Montclair. The Montclair community has been and is facing harmful algae blooms and other damage to our Lake, including the need to periodically dredge sediment out of our Lake at great cost. Something needed to be done.

Initially, it was not clear who owned this two-acre parcel. Numerous discussions with shopping center management, county, and state officials eventually determined that this land was owned by Prince William County (PWC). Once this was known, two outstanding champions emerged to help improve this "eyesore" plot, and at the same time help protect the lake from damaging sedimentation.

In short order, Mr. Tim Hughes, of the PWC Environmental Services staff rendered environmental "first aid" by planting grass on the numerous bare areas. This mitigated the worst of the erosion flowing into Lake Montclair.

Andrea Bailey, our Potomac District County Supervisor, stepped up and directed the county staff to provide additional help; she found funds to finance two reforestation projects, totaling 63 trees so far.

In December 2021, over a dozen volunteers from Master Gardeners of Prince William, Virginia Master Naturalist Merrimac Farm Chapter, PWC Staff, and Montclair residents, arrived with tools for the first tree planting mission. Supervisor Bailey and County Arborist Julia Flanagan both participated. In October 2022, another

LOOKING FOR MENTORS FOR 4HERS AT THE TEACHING GARDEN

(continued from p. 1)

January 24, 2023, Youth Training, Jean McCoy Conference Room (tentative). Sudley North Complex, 11:00 am to 1:00 pm, bring lunch. If you plan on volunteering for any program involving youth (Summer Reading Program, Girl Scout Education, Farm Field Days, etc.) you are required to have this training. Sign up on Better Impact: From your home page, go to Opportunities tab, select Opportunities List. Under the Filter Activities section, uncheck Filters (if necessary); Sort: Activity Name; Display: check Group by Category. Scroll down to **Continuing Education** category, then scroll to Youth Training (should be the last activity entry) to sign up. If you do not see Youth Training listed under Continuing Education, please call, or email Christina Hastings,

chastings@pwcgov.org 703-792-6285. 33 trees were planted by volunteers and Mr. Hughes. More trees are planned to be added each year with the goal of turning this area back into the vital forest it was decades ago.

Importantly, the earlier evidence of heavy soil erosion and silting into the lake from this plot is virtually gone. All the leaders and volunteers involved in this project hope it might spur residents from Montclair and other nearby communities to look carefully at their Resource Protection Areas (RPA) and other lands that drain into the lake and begin reforestation on both private property and common areas. The future health of Lake Montclair's water quality is at stake. Competitive grant funds are available at the state and county level to help defer the costs of "clean water" reforestation projects.

So, what does this mean to you as a homeowner in Prince William County? Even if your lot is not contributing sediment into our waterways, please consider planting native trees on your lot. Trees are a cost-effective way to save our waterways. As they grow, they will cool the water flowing into streams and lakes. Heat is a contributor to algae blooms. The root systems

"...earlier evidence of heavy soil erosion and silting into the lake from this plot is virtually gone."

filter excess nutrients of nitrogen and phosphorous that harm our watershed. Although fall is the ideal time to plant a tree, spring is a great time as well, and is not far off. Please

think about it. Increasingly, local nurseries stock native plants. Resources to consider, if you need advice:

- Virginia Cooperative Extension publications, particularly, <u>Publication</u> <u>450-237, "Problem-free Trees for</u> <u>Virginia Landscapes"</u>
- Virginia Department of Conservation and Recreation plant lists, including "Native Plants for Conservation, Restoration, and Landscaping"
- The Plant NoVA Natives website, <u>www.plantnovanatives.org</u>



restoration area

Note: 1 Larry and Eric are founding members of "Save lake Montclair" a 501(c)(4) nonprofit corporation. Larry is a member of the MGPW. Both are members of the Master Naturalists and are Chesapeake Bay Foundation "Clean Water Captains" for PWC. $\diamond\diamond\diamond$

FOR YOUR HEALTH: GARDENING KEEPS YOU HEALTHY

by Christina Hastings, Administrative Assistant Virginia Cooperative Extension, Master Gardener Volunteer

I read a Facebook post recently of a Master Gardener in Genesee County Michigan who turned 100 in December. She's still active as colead for their demonstration garden and has been a Master Gardener for 47 years! Reading that post made me remember that my mom tended her garden until she was 90. That got me thinking about what it takes both physically and mentally to continue gardening as we get older. What can we do to stay in shape both physically and mentally during the winter months? We don't want to jump into gardening without preparation, it could cause some serious injury and pain.

"...and just maybe we can still be gardening in our 90's!

"Playing in the dirt" is healthy, there is research that says it's so. I remember going in for my annual physical a few years ago, the nurse asked me what I do for exercise. I told her I garden (which includes cutting about a 1/2 acre with a push mower), she told me that wasn't exercising. However, the Center for Disease Control and Prevention (CDC) and other studies say differently. The CDC considers gardening a moderate-intensity level activity, it works every major muscle group. For example, turning your compost pile and hand weeding exercises your upper body, while raking and/or hoeing works your upper arms, shoulders, chest and back. To target your thighs and glutes – dig, and to get your heart pumping mow with a push mower.

Did you know that as little as 2.5 hours of gardening a week can reduce your risk for obesity, high blood pressure, type 2 diabetes, osteoporosis, depression, stroke, heart disease, colon cancer and premature death? The CDC study also found that those who chose gardening as their moderate-intensity exercise are more likely to exercise 40 to 50 minutes longer on average than those who chose walking or biking. In addition to exercise, "playing in the dirt" boosts vitamin D which increases calcium, benefiting our bones and immune system, and lowers our risk of dementia. Several articles I read mentioned that after retirement many people lose social contacts but belonging to a gardening group or a community garden helps combat loneliness and depression. Thank you Master Gardeners!

If gardening uses all the major muscle groups and most heavy gardening, at least for us, is done 7 to 8 months of the year, what are we doing the other 4 or 5 months to work those muscle groups, relieve stress, etc.? The answer is (and I'm speaking for myself) not a lot! Sure, you're reading some gardening books, tending your indoor plants,

looking at seed catalogs, planning your garden which is great for stress relief and those winter blues, but what about working those muscle groups?

Heavy gardening has been compared to heavy lifting and we should never jump into gardening without preparation to build strength and stamina. We could risk falling if our core body strength is off because our balance is off.

So, what does one do so you're not in agony after the first day of shoveling, raking, etc.? Here are a few simple suggestions I gathered from articles and Prince William County's Employee Wellness Coordinator to keep those muscle groups limber. Stretching is one of the most important things to do to get in shape. You can do this anytime really. I'm not a total slug in the winter. I do stretches in the morning and sometimes in the evening. Stretch your shoulders and your hamstrings. Walk, even if it's just around your house or yard. Walking is good for your core, make sure you stand tall with your shoulders back and relaxed, keep your hips even and concentrate on your core muscles as you move. Keeping your core steady supports your back. If you plan on doing a lot of digging, do chair squats, they help build your quadriceps, hamstrings, glutes, and core. Wall push-ups will prepare you for raking and hoeing. There are quite a few YouTube videos on how to do wall pushups for seniors and beginners. They work your chest muscles, arms and shoulders. Or you can do bicep curls with canned goods if you don't have weights or a resistance band. You can do these sitting in a chair.

All these exercises are easy to do, and you don't need to go to a gym. You can do these in the comfort of your home especially if the weather outside is cold, rainy, or snowy. If you don't mind braving the weather, you can join a yoga, tai chi, or dance class.

Don't forget about your hands. Limber up those hands! This is very important, particularly if you have Carpal Tunnel Syndrome or Arthritis. Prolonged repetitive motion can aggravate these conditions, so stretching is a must. Rotate your wrists, clockwise and counterclockwise.

So, get up and get moving to prevent those aches and pains in the spring and just maybe we can still be gardening in our 90's! >>>



- Shop for natives, specialty plants, and much more
- Browse garden-themed art, books, tools and garden accessories
- View nature-centric artwork by local artists in the Manor House
- Re-energize at a food truck

More details coming soon. For vendor and sponsorship inquiries, please contact Peter Tajat at plantsale@ahsgardening.org

MASTER GARDENERS WANTED: A MORNING AT THE HELPDESK

by Linda Gulden Help Desk Coordinator, Master Gardener Volunteer

The PWC Master Gardener Help Desk is one of the many tasks we undertake to serve the citizens of our county. The title doesn't sound very exciting and maybe you think this is not the kind of work you'd like to do as a Master Gardener. Let me tell you about what really happens at the desk!

Clients can contact the extension service for assistance via email, phone and in person. Since offices reopened we have tried to have a friendly face at the desk to help those who come into the office. In person requests are often sample plant and animal materials. These are examined in house and may be submitted to the lab at Virginia Tech for further analysis. We try to do as much in house as possible as there is a charge for plant analysis at VT. We often get inquiries that are somewhat out of the realm of MG training. It helps to develop an understanding of what is available in the county for residents. Often the client calling or emailing needs a referral to another county agency. Here are a few encounters I've had on the Help Desk to give you a flavor for the work.

An elderly couple drove to our Ashton Avenue office with a jar containing what they thought were "worms" which were invading their kitchen. They were sure there were no legs on these creatures and wanted to know what to do. A quick look and the creatures were identified as garden centipedes. Advice on how to manage this non-threatening arthropod was given and the clients left with the recommendation of a coffee shop in the area to visit.

A call came in from a gentleman who was calling for an elderly neighbor. Vultures roosting on the cell tower behind his home were ravaging his pick-up truck. The insulation had been torn from the sun roof, the wind shield wipers were pulled from their holders and left on the drive. Now you may think what does this have to do with Master Gardeners? We try to help find solutions for all kinds of problems and this was too good of a challenge to pass up. A quick call to the Virginia Human/Wildlife Conflict line yielded several solutions for the homeowner including stop feeding the feral cats (vultures were attracted to the food), contact the owner of the cell tower (vulture poop is corrosive to the structure!), use harass methods like the air wavy guys that mattress stores use to draw in customers! And now I have a new contact at the Wildlife conflict line!

A grower called to ask about the crops they were growing hydroponically. Nearly 20% of the crop was being lost to insects and disease in a greenhouse setting. This was a problem since these were greens and must be cosmetically perfect for sale at the farmer's markets. The client brought in samples and the issues were identified in house. A consult was made with the lab at VT to make sure we had the best recommendation for treatment.

Clients regularly ask for advice on landscaping, gardening, and tree care. We have lots of resources available to tap so the Help Desk volunteer doesn't need to have all the answers, just the willingness to search. The search usually begins with our capable staff, Thomas, Nancy, Valerie, Paige, and Christina. We have a database of contacts from the last 4 years in our "ticket" system. We have the resources of Virginia Tech and Virginia State University. And there is always the internet to use. To work the desk, one needs a bit of savvy with computer operations, willingness to learn our ticket system, the knowledge of which sources are dependable v. those best left in a chat room, and familiarity with the files in our office which develops with use. We ask for a minimum commitment of 2 half days per month in the office and a yearly help desk specific training held after recertification. Initial training includes working with several Help Desk volunteers to learn the ropes. If you are interested in becoming a help desk volunteer please contact linda2gulden@gmail.com. We'd love to have you on board!

Thanks for a great 2022!

Dear Extension Master Gardeners,

As another year comes to an end, we at the State EMG Office would like to take a moment to send our sincere thanks for all the dedication you have given to this program throughout the year. Whether you trained this year, are finishing your internship, or have been with the program for years, we are grateful that you continue to be willing to give of your time to strengthen your communities and the EMG Program.

We hope that you have a happy end of 2022 and a wonderful start to the new year. We look forward to seeing what is in store for this program in 2023, many exciting things are in the works! Thank you for all you do to make Virginia a wonderful place to live.

Best, Kathleen and Devon The EMG State Office Team

Watch a holiday message from Dr. Mike Gutter, Director of Virginia Cooperative Extension





IN THE COMMUNITY: VOLUNTEERS PLANT TREES ALONG THE OCCOQUAN

excerpted from INSIDE NOVA, November 15, 2022, <u>Volunteers plant trees</u> <u>along the Occoquan</u>, by Tim Hughes, Prince William County Environmental Specialist

"The newly-planted trees on Prince William County-owned land near the bridge crossing the Occoquan Reservoir are just saplings, but in time they will grow and create a little ecosystem, county officials say.

'After probably the second year, you'll start seeing birds on the young trees,' Tim Hughes, environmental specialist with Prince William County Public Works Environmental Services Division, said in a news release. 'Then, the natural vegetation and grasses start growing. Once the forest grows in, after about five years, it looks natural.'

Volunteers from Girl Scout Troop 1719, out of Lake Ridge, and the NOVA Chapter of Climate Reality Project, under the guidance of master gardeners from the Virginia Cooperative Extension-Prince William, or VCE, recently planted 110 native saplings at 6320 Davis Ford Road. Redbuds, sycamores, flowering dogwoods, river birches, pin oaks, swamp white oaks, red maples, paw paws, hornbeams, black gums, service berries and tulip poplars are now homed in the space.

The volunteers planted the trees in a resource protection area, or RPA. RPAs contain perennial streams or bodies of water critical to the watershed. Prince William County is required to protect RPAs in accordance with the Chesapeake Bay Preservation Act.

Restoring RPAs through reforestation helps keep water clean in Prince William County and beyond.

'It helps in so many ways,' Hughes said. 'We're restoring a resource protection area, and we're protecting water quality. In this case, the Occoquan Reservoir is a source of drinking water for several million people locally. It reduces stormwater runoff and protects the streams, banks and waterways that feed the Potomac River, which feeds into the Chesapeake Bay. Anything we can do to reforest and restore the RPA contributes to all things good.'

In addition to planting the saplings, the volunteers planted 150 tree cuttings called live stakes along the water's edge.

'They root over time and hold the banks together,' VCE Education Outreach Instructor Nancy Berlin said of the live stakes.

Reforestation projects offer financial and environmental benefits to the county, experts say.

'It saves the county money because we're no longer paying to manage or mow the turf areas,' Berlin said. 'We're converting it to forest with native trees. Of course, it helps with air quality and carbon sequestration too."

To read or listen to the full article, click here ♦♦♦

Are you a forest landowner?

Virginia Tech, in partnership with numerous state, federal and private partners, offers a wide variety of science-based educational opportunities for new and experienced forest landowners through their *Virginia Forest Landowner Education Program*.

sign up for their newsletter





Plant NOVA Natives is the joint marketing campaign of a grand coalition of non-profit, governmental, and private groups, all working to reverse the decline of native plants and wildlife in Northern Virginia.

Our strategy is to encourage residents as well as public and commercial entities to install native plants as the first step toward creating wildlife habitat and functioning ecosystems on their own properties.

All are welcome to participate in this collective action movement!

PLANT NOVA NATIVES: MANAGING LARGER PROPERTIES FOR BIRDS, BUTTERFLIES, AND PEOPLE

reprinted with encouragement from <u>PLANTNOVANATIVES</u>, <u>November</u> 15, 2022; thanks to Leslie Paulson, Master Gardener Volunteer

The outdoor space on larger properties in Northern Virginia, whether residential or commercial, is typically divided into formal landscaping close to buildings and natural areas at the periphery. New practices are emerging on how to manage both areas, practices that protect the ecosystem and support the birds and the butterflies while better satisfying human needs.

The natural areas between properties are an important amenity, providing visual barriers and sound buffers while capturing stormwater and reducing flooding. Looking around, it is evident that those natural areas are often being left to take care of themselves. The result is that they are steadily degrading as the native trees are displaced by invasive non-native trees and directly killed by invasive vines. The shrubs and ground layers are equally damaged by invasives species at those levels. Many of these invasive plants originate from the landscaped areas where they had been planted before people knew to do otherwise. Preserving trees and habitat in both areas requires taking out the invasives and replacing them with native species, of which numerous options are available.

Some other tweaking is also needed to common landscaping practices. To name a few examples, piling mulch against the trunks of trees causes the bark to rot. Blowing the fallen leaves out from under trees destroys the cover where fireflies and many butterflies overwinter. Leaf blowers with two-stroke engines pour pollution into the air and are loud enough to damage workers' ears. Outdoor lighting can adversely affect birds, insects and plants. Spraying insecticides kills the bees and caterpillars even more than the mosquitoes they are intended to target. Simple solutions are available to mitigate all these problems.

Professional property managers and community managers negotiate the contracts with landscaping companies and can work with them to adjust their services. Details of the various options for both landscaped and natural areas can be found on the Plant NOVA Trees website in a section specifically for professionals. www.plantnovatrees.org/property-managers Please spread the word to the managers of any properties where you live or work. www.plantnovatrees.org/property-managers Please spread the word to the

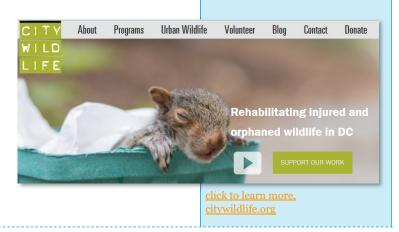
CONSERVATION AT HOME: CITY WILDLIFE

by Maria Stewart, Master Gardener Volunteer

Wildlife is all around us—even in the city! And where there are people in close proximity to wildlife, wildlife will get hurt. Thankfully, we have an opportunity to be better neighbors to our fellow creatures, and City Wildlife, based in Washington, DC, is here to help.

City Wildlife was created with the goals to:

- manage a rescue center to assist sick, orphaned, and injured wild animals and return them to the wild;
- promote the enjoyment of native wildlife and harmonious co-existence with wild animals;



"Collisions with buildings kill more birds than any other single human factor besides habitat loss and domestic cats."

• protect the District of Columbia's wild places for animal habitats.

City Wildlife established a *Rehabilitation Center*, "to provide emergency and critical care to the District's native wildlife." Since they opened in July, 2013, they have "treated more than 6,200 animals, representing more than 90 different species of birds, mammals, reptiles, and amphibians."

Their *Lights Out DC* program addresses the haunting number of birds lost to collisions with glass windows. "During migratory seasons, *Lights Out DC* volunteers walk a four-mile route in downtown Washington to inspect buildings and collect dead or injured migratory birds that have collided with glass. Injured birds are monitored and released (if recovered) or taken to City Wildlife's rehabilitation center if their injuries are more severe. Dead birds are tagged and saved. The statistics are used to convince building owners and managers to adopt light abatement procedures for the sake of migrating birds." The *Lights Out DC* program is modeled after similar highly successful programs in Chicago, Toronto, Boston, New York, and Baltimore.

City Wildlife's *Duck Watch* program educates building managers and city residents about ways they can help Mallard families, "and make unsuitable nesting sites less appealing to mother Mallards." During nesting season, volunteers monitor nests. When the ducklings are ready, volunteers escort young families through the dangers of the city to reach water safely.

City Wildlife also supports education in schools, youth groups, civic associations, and other groups wanting to learn more about how to protect and live harmoniously with wildlife in the city. Nature and wildlife are among us. City Wildlife is helping humans be better neighbors to our fellow creatures. ♦♦♦



City Wildlife Volunteer Providing

Animal Care



Prince William has a core group of trained Master Gardeners in the <u>Audubon at Home program</u> who have certified over 100 homes. To make more land in Prince William County wildlife-friendly, start to certify your property today! If you are ready to make your backyard or community space more environmentally friendly, give us a call at 703-792-7747 or email master-gardener@pwcgov.org.



PLANT NOVA TREES: SOLAR PANELS VS. TREES – HOW TO CHOOSE?

reprinted with encouragement from <u>PLANTNOVATREES</u>, <u>December 16</u>, <u>2022</u>; thanks to Leslie Paulson, Master Gardener Volunteer

Residents who are interested in installing solar panels often face a dilemma. Which is better for the environment, solar panels or shade trees? After all, climate change due to burning fossil fuels is threatening the very existence of trees, not to mention human beings, and the timeline for preventing catastrophic temperature rises is short. Before we get out the chainsaw, though, there are several other things to consider.

One of the main reasons to try to limit temperature rise is to prevent ecosystem collapse. The native trees in our yards are as much a part of that ecosystem as the ones in the Amazon, providing food, shelter and nesting places not only for birds and mammals but for a myriad of invertebrates that are a critical part of the web of life. If we do not even protect the environment where we live, we can hardly expect people in the Amazon to take more of an interest.

Sunny rooftops are an ideal place to put solar panels, since that real estate is already built upon, and since decentralizing the grid helps build resilience. The land use anticipated for solar farms and new transmission lines is so massive, and the willingness of companies to replace forests with them so counterproductive and disheartening, that the more we use our own rooftops, the better. But solar energy is neither the only way to reduce fossil fuel use nor the most efficient of the various options for homeowners. The first step should always be to reduce energy consumption, by weatherizing and taking other steps to reduce waste. For those ready to make a big investment, an alternative to consider is a heat pump or even a geothermal system for heating and air conditioning. As is true for solar panels, the cost of installation can be partially offset by a significant tax credit. Some utility companies including Dominion allow customers to choose a renewable energy option (although "renewable" is not always the same as "clean," since it includes burning chopped down trees, for example. But much of that electricity is generated by wind and solar farms.) It will take considerable effort and broad participation for our community to meet its climate goals, but not everyone has to do everything themselves on their own property. Those with sunny roofs can contribute solar energy. Those with trees can take care of them.

Trees themselves are what are known as a "natural climate solution." They provide benefits that mitigate the effect of climate change. Trees improve the energy efficiency of houses. In the winter, they reduce heating costs by blocking the wind. In the summer, they reduce air conditioning costs, since roofs and walls in the shade are often twenty degrees cooler than those in the sun. In addition, trees improve air quality and sequester carbon dioxide. Their ability to capture stormwater is particularly important in flood-prone suburban and urban areas with their excess of impervious surfaces. The leaves of the trees capture much of the rain before it even reaches the ground. Once it does, transpiration by canopy trees sucks thousands of gallons of water from the ground, thus enabling the soil to control flooding.

It is interesting to use the National Tree Benefit Calculator found at the bottom of this link, to see what you save in monetary terms by preserving a few mature trees, strategically located around your property. For the birds and other critters that depend on them, the native trees are priceless.



Plant NOVA Trees is a focused drive by the Plant NOVA Natives campaign to increase the native tree canopy in Northern Virginia. The drive launched in September 2021 and continues through the fall of 2026.

<u>learn more</u>

CRITTER NEIGHBORS: GREEN BOTTLE FLY (*LUCILIA SERICATA*)

by Jason Alexander, Master Gardener Volunteer

The Green Bottle Fly, Lucilia sericata, is among the most common blow flies found throughout the world. Its life cycle is used in forensic investigation and the larvae (maggots) are used in medical treatment to heal otherwise incurable wounds. They are attracted to feces, carrion and garbage, playing another important role in the natural recycling process. ♦♦♦



photos by Jason Alexander



Source:

<u>University of Florida; Featured</u> <u>Creatures</u>

What is a Master Gardener?

Virginia Cooperative Extension Master Gardeners (VCE-MG) are trained volunteer educators who provide the public with environmental information that draws on the horticultural research and experience of Virginia Polytechnic Institute and Virginia State University.

Join Us!



Charlie the snake at the Manassas

HORTICULTURE CLASS OF PARTICULAR NOTE:

MGPW EDUCATION COMMITTEE: VIRGINIA SNAKE **IDENTIFICATION**



Virginia Cooperative Extension Virginia Tech · Virginia State University

MGPW Education Committee

Announces a free program open to the public

Virginia Snake Identification

Overview and Discussion



Saturday, January 21, 2023 10 am to 12 Noon

Old Manassas Courthouse 9248 Lee Avenue Manassas, VA 20109

Speaker Bill Crisp will discuss how to accurately identify snake species of Virginia and provide the best practices for limiting snake access to your property, and your house...





If you are a person with a disability and desire any assistive devices, services, or other accommodations to participate in this activity, please contact Christina Hastings, Virginia Cooperative Extension – Prince William at 703-792-6285/TDD* during business hours of 8:00 a.m. and 5:00 p.m. to discuss accommodations 5 days prior to the event.

*TDD number is (800) 828-1120.

Virginia Cooperative Extension is a partnership of Virginia Tech, Virginia State University, the U.S. Department of Agriculture, and local mments. Its programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, nat origin, political affiliation, race, religion, sexual orientation, genetic information, military status, or any other basis protected by law.

HORTICULTURE SERIES OF PARTICULAR NOTE:

A TASTE OF FARMING: SEASON 2







Season 2 A Taste of Farming

October 2022-March 2023

Are you aspiring to farm or just starting out with farming? If so, this "learn as you go" online series is for you! It is designed to help you get a taste of different farming practices and concepts so you can explore your interests, gain a basic understanding of different farming topics, avoid common pitfalls, and get to know the Extension professionals in Virginia here to assist you.

Season 2 runs from October 2022 to March 2023. Each month, we will release two new Taste of Farming videos for you to watch! A few weeks after a moderated Q & A session will be held with the presenters where you can hear more from them and have your questions answered. Our schedule is listed below and videos and registration links are available on our website:

vabeginningfarmer.alce.vt.edu/TasteofFarming.html

Please reach out to Sarah Sharpe at seweaverevt.edu or Katie Trozzo ketrozzoevt.edu if you have questions.

NOVEMBER Q& A SESSION: NOV 10 FROM 7-8PM ET

- Nicole Shuman, Goochland County VCE Ag Agent on "How to Interpret a Soils Test"
- Mike Parrish, Dinwiddie County VCE Ag Agent on "Information for New Pesticide Applicators"

DECEMBER Q& A SESSION: DEC 8 FROM 7-8PM ET

- Erin Small, Prince Edward VCE Ag Agent on "Floriculture"
- Beth Sastre, Loudoun VCE Ag Agent, on "Vineyard Establishment"

JANUARY Q& A SESSION: JAN 18 FROM 7-8 PM ET

- Kevin Spurlin, Grayson County VCE Ag Agent, and Ashley Edwards, Carroll County VCE Ag Agent on "Christmas Tree Farming"
- Speaker TBD on "Tree Fruit Production"

FEBRUARY Q& A SESSION: FEB 23 FROM 7-8PM ET

- Mandy Fletcher, VSU Small Farm Outreach Program Assistant SW VA Region on "Sheep and Goat Production"
- Sarah Sharpe, Greene VCE Ag Agent, on "Direct Marketing Meat"

MARCH Q& A SESSION: DATE TBD

- Tracy Porter, VSU Small Farm Outreach Program Assistant, Northern Neck, Middle Peninsula, Eastern Shore Region on "Poultry Production"
- Jeremy Daubert, Rockingham County VCE Ag Agent, and Cynthia Martel, Franklin County VCE Agent on "Starting a Small Dairy (Cows and Goats)"

If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in this activity, please contact Katie Trozzo at 540–231–4582 during business hours of 9 a.m. and 5 p.m. to discuss accommodations at least 5 days prior to the event.

Beginning Farmer & Rancher





Virginia Cooperative Extension is a partnership of Virginia Tech, Virginia State University, the U.S. Department of Agriculture, and local governments. Its programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, military status, or any other basis protected by law.

SAVE THE DATE:

5TH ANNUAL PRINCE WILLIAM NATIVE PLANT SYMPOSIUM

save the date!

5th Annual Prince William Native Plant Symposium

2023

Saturday, February 11 Snow Date: February 18

9 AM - 4 PM

STOP MOWING, START GROWING!

A Native Plant Symposium for Beginners & Beyond

Create a Beautiful Yard, Save Time & Money, Improve Water Quality, Build Habitat for Pollinators & Birds.



Keynote Speaker: Nancy Lawson, The Humane Gardener

Verizon Auditorium George Mason University 10900 University Blvd. Manassas, VA 20110

Registration opens early January, Hybrid event: In Person or Online













Virginia Cooperative Extension is a partnership of Virginia Tech, Virginia State University, the U.S. Department of Agriculture, and local governments. Its programs and employment are open to all, regardless of age, color, disability, gender, gender identity, gender expression, national origin, political affiliation, race, religion, sexual orientation, genetic information, military status, or any other basis protected by law. If you are a person with a disability and desire any assistive devices, services or other accommodations to participate in this activity, please contact Ashley Studholme, PW Conservation Alliance at (703) 490-5200/TDD (800) 828-1120, during business hours of 9:00 a.m. and 4:00 p.m. to discuss accommodations 5 days prior to the event.

Master Gardeners Prince William

Master Gardeners of Prince William (MGPW) is the supportive organization for active Master Gardener Volunteers in Prince William County, Manassas City and Manassas Park. There are approximately 200 active volunteer environmental educators serving in various capacities.

Volunteers and volunteerism are central to the MGPW mission as we strive to make our community a more sustainable, healthy and beautiful place to live and to educate residents about the many benefits of gardening, including the opportunity to grow nutritious, healthy food, environmentally friendly landscapes, all with the ultimate goal of protecting water quality in local waterways and the Chesapeake Bay.

FREE ONLINE CLASSES / HELPDESK

Virginia Cooperative Extension (VCE) hosts classes via zoom Wednesdays, 11:00 a.m. to Noon. For a schedule of classes, and to register, click here: Prince William County Cooperative Extension Horticulture Classes.

If you would like to receive alert notifications about our programs and classes go to: www.pwcgov.org/pwcan

- Select "Stay Informed" PWC Alerts icon
- Sign up for PWC Alerts.
- Create your profile
- To receive notifications on our classes select "Community Information"

QUESTIONS? VCE Staff and Master Gardener Volunteers are working to answer your lawn and garden questions. Please contact the Horticulture Helpdesk by emailing mastergardener@pwcgov.org or call 703-792-7747.

Help Support Master Gardeners Prince William while you shop with (click the icons to learn more):







PLEASE PLACE STAMP HERE

-Send submissions, questions, or comments to

MGPWnewsletter@gmail.com

The Editors,

Jason Alexander & Maria Stewart, Master Gardener Volunteers